

IN THE CLAIMS

For the Examiner's convenience, all pending claims are presented herein in a clean, unmarked format.

Please delete pending claims 1-35.

Please insert new claims 36- 77.

36. (New) A system for detecting the presence of an active connection to a data transmission network, including a network medium, to a computing device, the system comprising:

means for making a connection to the network medium;

means for comparing any signal found on the network medium to a predetermined standard; and

means for signaling the computing device when any signal found on the network medium is an active network signal; and

wherein the network medium comprises a positive signal electrical conductor and a negative signal electrical conductor and the means for comparing any signal found on the network medium to a predetermined standard compares the signals regardless of the connection orientation of the positive signal electrical conductor and the negative signal electrical conductor.

37. (New) A system as defined in claim 36 wherein the means for making a connection to the network medium comprises:

means for DC filtering of the signal;
means for providing electrical isolation; and
means for providing a DC bias.

38. (New) A system as defined in claim 36 wherein the means for comparing any signal found on the network medium to a predetermined standard comprises:

means for providing a reference voltage; and
means for comparing the signal to the reference voltage.

39. (New) A system as defined in claim 36 wherein the predetermined standard comprises a DC reference voltage.

40. (New) A system as defined in claim 36 further comprising a network adapter card and wherein the means for making a connection to the network medium, the means for comparing any signal found on the network medium to a predetermined standard; and the means for signaling the computing device are all located on the network adapter card.

41. (New) A system as defined in claim 40 wherein the network adapter card comprises a PC Card.

42. (New) A system as defined in claim 40 wherein the network adapter card is located substantially within the computing device.

43. (New) A system as defined in claim 36 wherein the means for comparing any signal found on the network medium to a predetermined standard comprises a first comparator and a second comparator.

44. (New) A system as defined in claim 36 wherein the means for comparing any signal found on the network medium to a predetermined standard comprises a first comparator and a second comparator, the first and the second comparators comprising open drain comparators having their outputs connected together.

45. (New) A system as defined in claim 36 wherein the means for making a connection to the network medium and the means for comparing any signal found on the network medium to a predetermined standard do not significantly load the network medium when connected thereto.

46. (New) A system as defined in claim 36 wherein the means for signaling the computing device when any signal found on the network medium is an active network signal comprises a output shaping circuit providing an output signal indicating when an active network signal is present on the network medium.

47. (New) A system as defined in claim 36 wherein the means for signaling the computing device when any signal found on the network medium is an active network signal comprises an output shaping circuit having an RC time constant of approximately 0.1 ms.

48. (New) A system as defined in claim 36 wherein the data transmission network complies to an Ethernet network standard.

49. (New) A system as defined in claim 36 wherein the network medium comprises twisted pair cable.

50. (New) A system as defined in claim 36 wherein the network medium comprises coaxial cable.

51. (New) A system as defined in claim 36 wherein the network medium comprises fiber optic cable.

52. (New) A system for detecting the presence of an active connection to a data transmission network, including a network medium, to a computing device, the system comprising:

means for making a connection to the network medium;

means for comparing any signal found on the network medium to a predetermined standard; and

means for signaling the computing device when any signal found on the network medium is an active network signal; and

wherein the means for comparing any signal found on the network medium to a predetermined standard comprises a first comparator and a second comparator, the first and the second comparators comprising open drain comparators having their outputs connected together.

53. (New) A system as defined in claim 52 wherein the means for comparing any signal found on the network medium to a predetermined standard comprises a first comparator and a second comparator.

54. (New) A system as defined in claim 52 wherein the means for comparing any signal found on the network medium to a predetermined standard comprises a first comparator and a second comparator, the first and the second comparators comprising open drain comparators having their outputs connected together.

55. (New) A system as defined in claim 52 wherein the means for making a connection to the network medium and the means for comparing any signal found on the network medium to a predetermined standard do not significantly load the network medium when connected thereto.

56. (New) A system as defined in claim 52 wherein the means for signaling the computing device when any signal found on the network medium is an active network signal

comprises a output shaping circuit providing an output signal indicating when an active network signal is present on the network medium.

57. (New) A system as defined in claim 52 wherein the means for signaling the computing device when any signal found on the network medium is an active network signal comprises an output shaping circuit having an RC time constant of approximately 0.1 ms.

58. (New) A system as defined in claim 52 wherein the data transmission network complies to an Ethernet network standard.

59. (New) A system as defined in claim 52 wherein the network medium comprises twisted pair cable.

60. (New) A system as defined in claim 52 wherein the network medium comprises coaxial cable.

61. (New) A system as defined in claim 52 wherein the network medium comprises fiber optic cable.

62. (New) An apparatus comprising:

a filtering device to DC filter an input signal from a network medium;

an electrical isolation device to provide electrical isolation from the network medium; and

a network signal detection device to selectively indicate whether the input signal is an active network signal in response to a comparison with a reference signal.

63. (New) The apparatus of Claim 62, further comprising a reference signal source to provide the reference signal.

64. (New) The apparatus of Claim 62, wherein the network signal detection device comprises:

logic circuitry to compare the input signal with the reference signal and to indicate a result of the comparison.

65. (New) The apparatus of Claim 62, wherein:
the input signal comprises first and second signals, and
the network signal detection device comprises a first comparator and a second comparator, wherein:

the first comparator comprises logic circuitry to compare the first signal with the reference signal and to provide a comparison at an output terminal of the first comparator,

the second comparator comprises logic circuitry to compare the second signal with the reference signal and to provide a comparison at an output terminal of the second comparator, and

the first and the second comparators comprise open drain comparators having output terminals coupled together.

66. (New) The apparatus of Claim 62, wherein the network medium comprises:
a positive signal electrical conductor and a negative signal electrical conductor and wherein the network signal detection device compares the input signal with the reference signal regardless of a connection orientation of the positive signal electrical conductor and the negative signal electrical conductor.

67. (New) The apparatus of Claim 62 further comprising an output shaping device to selectively signal when the input signal is an active network signal in response to the network signal detection device indicating that the input signal is an active network signal.

68. (New) A method comprising:
receiving an input signal from a network medium;
DC filtering the input signal;
providing electrical isolation from the network medium;
comparing the input signal with a predetermined standard; and
selectively signaling when the input signal is an active network signal in response to the comparison between the input signal and the predetermined standard.

69. (New) The method of Claim 68, wherein the predetermined standard comprises a reference voltage.

70. (New) The method of Claim 68, wherein the act of receiving comprises making a connection to the network medium without significantly loading the network medium.

71. (New) The method of Claim 68, wherein the input signal comprises a differential signal.

72. (New) A system comprising:
a media access controller to perform MAC processing operations; and
a medium attachment unit to interface a network medium with the media access controller, wherein the medium attachment unit comprises:
a filtering device to DC filter an input signal from the network medium,
an electrical isolation device to provide electrical isolation from the network medium, and
a network signal detection device to selectively indicate whether the input signal is an active network signal in response to a comparison with a reference signal.

73. (New) The system of Claim 72, wherein the transceiver receives signals from the network medium in compliance with Ethernet.

74. (New) The system of Claim 72, wherein the transceiver receives signals from the network medium in compliance with PCMCIA.

75. (New) The system of Claim 72, wherein the transceiver receives signals from the network medium in compliance with ISA.

76. (New) The system of Claim 72, wherein the transceiver receives signals from the network medium in compliance with RS-232.

77. (New) The system of Claim 72, wherein the transceiver receives signals from the network medium in compliance with PCI.